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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,707	03/30/2004	Ronald K. Richey	SM 1075	7209
7590		06/23/2008		
Seymour Levine 2 Chateaux Circle Scarsdale, NY 10583			EXAMINER	
			OLSEN, LIN B	
			ART UNIT	PAPER NUMBER
			3661	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/814,707	<b>Applicant(s)</b> RICHEY, RONALD K.
	<b>Examiner</b> LIN B. OLSEN	<b>Art Unit</b> 3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 March 2008.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 14,17-27 and 110 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 10-14 is/are allowed.
- 6) Claim(s) 21-27 is/are rejected.
- 7) Claim(s) 17-20 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/1449)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Specification***

The disclosure is objected to because of the following informalities:

The abstract of the disclosure is objected to because the word "ware" in line 4 of Page 14, should be "wear".

Appropriate correction is required.

***Response to Arguments***

Applicant's arguments, see pages 7-9 filed March 28, 2008 with respect to the rejection(s) of claim(s) 1-20 under 35 USC 103(a) have been fully considered and are persuasive as to the distinction between a time limit versus a frequency limit. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Applicant's presentation of new claims.

Claims 10-13, and 17-27 are pending in this application. Claims 1-9 and 14-16 have been canceled

***Claim Objections***

**Claim 17** is objected to because of the following informalities:

In line 2 of claim 17 the expression "a solenoids" is used, the examiner suggests this should be "solenoids".

On line 3 of claim 17, the expression "the rudder position errors" is used, the examiner suggests this should be "a rudder position error".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 21-24 and 25-27** are rejected under 35 U.S.C. 112 first paragraph.

**Claim 21** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification is enabling for changing a stop rudder error based on a rudder stopping error determined by the difference between a rudder order and a rudder position after said rudder drive system is turned off , comparing said rudder stopping error to a predetermined position tolerance, and determining a new stop rudder error in accordance with said rudder stopping error such that said rudder position after said rudder drive is turned off does not differ from said rudder order by more than said predetermined position tolerance. This is well described in the specification page 6, line 21 to page 7, line 10 and further illustrated by the example following. The specification does not reasonably provide enablement for "determining a difference between a desired rudder stop position (rudder order) and rudder stop position after said rudder drive system is turned off; comparing said rudder

stop position to said desired rudder stop position to establish a rudder stop error; and determining a stop position for said rudder in accordance with said rudder stop error such that said rudder stop position does not exceed a predetermined position tolerance." The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The specification does not teach one to determine a stop position for the rudder on which to base the stop command, this is new matter in the claim. Rather the specification teaches using a separate value of rudder error to trigger the command that stops the rudder drive system.

**Claims 22-24** are rejected for the same reasons as they expand on the limitations of claim 21 which are not enabled by the specification.

**Claim 25** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification is enabling for specifying a predetermined stop rudder error to be compared to the actual stop rudder error determined by the difference between a rudder order and a rudder position and causing the drive to be turned off when the actual stop rudder error equals the predetermined stop rudder error. Further the specification supports a turnoff adjuster to adjust the value of the predetermine stop rudder error if the actual stop rudder error after the rudder

stops moving exceeds a limit. The amount of adjustment is dependent on the actual stop rudder error after the rudder stops moving and whether the rudder position undershoots or overshoots. This is well described in the specification page 6, line 8 to page 7, line 10 and further illustrated by the example following. The specification does not reasonably provide enablement for "a rudder drive system that positions rudders in accordance with a rudder stop position error determined by differences between a selected rudder position and a rudder stop position achieved after rudder drive system turn off; a rudder position turnoff adjuster coupled to said rudder drive system for resetting said turnoff in accordance with said rudder stop position error, thereby providing an adjusted turnoff", this is new matter in the claim. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. The specification teaches one to determine a predetermine rudder stop error on which to base the stop command.

**Claims 26-27** are rejected for the same reasons as they expand on the limitations of claim 25 which are not enabled by the specification.

***Allowable Subject Matter***

**Claims 10-13** are allowed.

**Claim 17** would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

**Claims 18- 20** would be allowable if the independent claim upon which they depend were amended or rewritten to overcome the objections set forth in this Office action.

The following is an examiner's statement of reasons for allowance: The cited prior art neither teaches nor suggests allowing solenoids to be energized at a frequency exceeding their burnout protection frequency and allowing that exceeding action to trigger adjusting the parameter that causes energizations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIN B. OLSEN whose telephone number is (571)272-9754. The examiner can normally be reached on Mon - Fri, 8:30 -5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. B. O./  
Examiner, Art Unit 3661

/Thomas G. Black/  
Supervisory Patent Examiner, Art Unit 3661